

Appl. No. : 10/781,574
Filed : February 17, 2004

REMARKS

Claims 1-17 are pending in the present application and stand rejected on a variety of grounds, each of which is addressed below.

Claim Rejections Under 35 U.S.C. § 102

Claims 1-3 and 5-13 were variously rejected under 35 U.S.C. § 102 as being anticipated by Albert (U.S. Patent No. 4,219,853), Okamoto (U.S. Patent No. 6,329,087) or Inoue (U.S. Patent No. 2002/0145834) for the reasons of record set forth in the previous Office Action, mailed on May 3, 2005. In response to Applicant's previous arguments that there are significant structural differences between ALD formed layers and traditional PVD formed layers, the Examiner argues that since Applicants are claiming a product and not a method, the method must be shown to result in an unobvious difference in structure. Applicant's respectfully disagree and submit that a rejection for anticipation is not appropriate if there is *any* difference between the claimed product and that disclosed in the prior art.

Secondary considerations such as unexpected results are irrelevant to rejections under 35 U.S.C. § 102 (see M.P.E.P. § 2131.04). Rather, a claim is anticipated only if each and every element as set forth in the claims is found, either expressly or inherently described, in a single prior art reference." *Verdegaal Bros. v. Union Oil Co.*, 814 F.2d 628, 631, 2 U.S.P.Q.2d 1051, 1053 (Fed. Cir. 1987). Here, the prior art cited by the Examiner does not teach or suggest an atomic layer position formed head gap fill layer as recited in the claims. As discussed in Applicant's previous response and undisputed by the Examiner, an ALD-formed head gap fill layer is different from a PVD-formed layer. As the claimed layers are different from the layers disclosed in the art, Applicants submit that a rejection under 35 U.S.C. § 102 is improper, and the present rejections for anticipation should be withdrawn.

Claim Rejections under 35 U.S.C. § 103

Claims 3, 4, 8-10 and 14-17 were rejected under 35 U.S.C. § 103(a) as obvious over Inoue or Okamoto in view of Applicants "admissions". This rejection has also been maintained from the previous Office Action.

As discussed above, Inoue and Okamoto fail to teach or suggest an ALD-formed head gap fill layer as recited in independent Claims 1 and 14. Claims 3, 4, 8-10 and 15-17 depend from Claims 1 and 14, respectively, and contain all the limitations thereof in addition to further distinguishing features. Thus, Applicants submit that the conditions under 35 U.S.C. § 103 should be withdrawn as well.

In addition, Applicants continue to disagree with the Examiner's finding that Applicants have admitted a thickness variation of less than 2% was known in the prior art. The Examiner's conclusion is based on a statement in the background section of the specification. First, Applicants submit that the mere fact that a statement is located in the background section of the specification does not mean that it is admitted to be prior art. The Examiner has cited no authority for that proposition. In addition, the statement itself does not indicate that a thickness variation of 2% was known in the prior art. To the contrary, the statement is part of a list of desirable properties identified by the inventors and is followed by a discussion of how the prior art fails to provide these properties. Thus, Applicants continue to maintain that the disclosure of the advantage of a thickness variation of less than 2% in the specification, whether in the background or elsewhere, is not an admission that the benefits of such a thickness variation would have been known to one of skill in the art at the time the application was filed.

The Examiner further found that it was obvious that one would want a uniform thickness across the film since any nonuniformity will decrease the sensitivity of the head. Applicants respectfully submit that this does not teach or suggest that less than 2% thickness variation would be desirable. The Examiner's logic is equally applicable to painting house by ALD. It is well known that some degree of uniformity is desirable in painting a house. This does not amount to a suggestion to use ALD for painting a house. Similarly, without a specific recognition in the prior art, rather than Applicants own disclosure, of the desirability or benefits of the degree of uniformity ALD affords over PVD in the context of head gap fill layers, the Examiner has not made a showing that the recited degree of uniformity would be obvious to the skilled artisan.

Finally, contrary to the Examiner's assertion at the top of page 5 of the Office Action, it does not follow that because one of skill in the art "would recognize" differences between an ALD deposited layer and a PVD deposited layer the differences are "not unobvious" in the claimed context. The benefits of ALD, such as those stated in U.S. 6,700,752 and referred to by

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the Examiner have no connection to the claimed context. That is, as in the example above, without any specific recognition in the prior art that the particular benefits of ALD would be desirable in the context of head gap fill layers, the mere fact that one of skill in the art would be aware of differences between ALD and PVD formed layers would not make the present claims obvious. The Examiner has provided no reference that teaches or suggests the desirability of using ALD in the context of head gap fill layers. Thus, Applicants submit that the pending claims are neither anticipated by nor obvious in view of the cited references.

CONCLUSION


In view of the arguments presented above, Applicants submit that the present application is in condition for allowance and respectfully requests the same. If any issues remain, the Examiner is cordially invited to contact Applicant's representative provided at the number provided below in order to resolve such issues promptly.

Please charge any additional fees, including any fees for additional extension of time, or credit overpayment to Deposit Account No. 11-1410.

Respectfully submitted,

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Dated: January 18, 2006

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